

LESSON
16-3

Box Plots

Reteach

A **box plot** gives you a visual display of how data are distributed.

Here are the scores Ed received on 9 quizzes: 76, 80, 89, 90, 70, 86, 87, 76, 80.

Step 1: List the scores in order from least to greatest.

Step 2: Identify the least and greatest values.

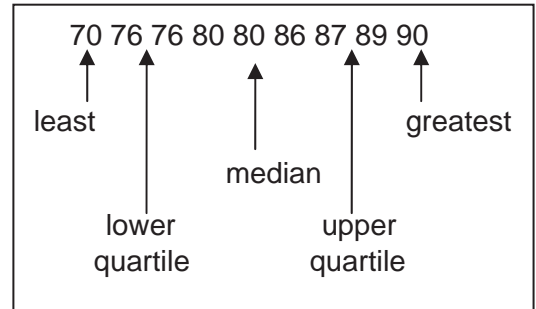
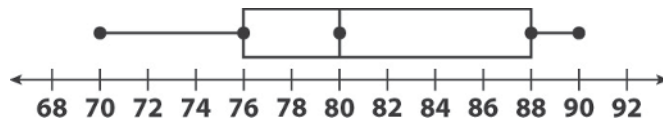
Step 3: Identify the median.
If there is an odd number of values, the median is the middle value.

Step 4: Identify the lower quartile and upper quartile. If there is an even number of values above or below the median, the lower or upper quartile is the average of the two middle values.

Step 5: Draw a number line that includes the values in the given data.



Step 6: Place dots above the number lines at each value you identified in Steps 2–4. Draw a box starting at the lower quartile and ending at the upper quartile. Mark the median, too.



Use the data at the right for Exercises 1–5. Complete each statement.

| | | |
|----|----|----|
| 20 | 6 | 15 |
| 10 | 14 | 15 |
| 8 | 10 | 12 |

- List the data in order: _____
- Least value: _____ Greatest value: _____
- Median: _____
- Lower quartile: _____ Upper quartile: _____
- Draw a box plot for the data.

